

## Patent Abstracts of Japan

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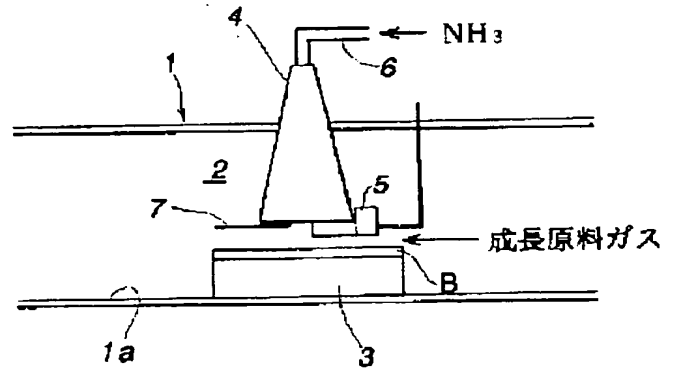
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TITLE : EXCITATION CELL EQUIPMENT FOR  
EPITAXIAL CRYSTAL GROWTH  
DEVICE



ABSTRACT : PURPOSE: To facilitate excitation of growth material gas or doping gas, by a method wherein, only by making gas to be excited pass through a casing of a cell equipment, said gas is optically excited.

CONSTITUTION: A gallium arsenide substrate B is retained by a susceptor 3 so as to face upward, and rotated and heated. At this time, growth material gas is supplied to a reaction chamber 2 from an inner channel 1a. A light source 5 of an excitation cell equipment 4 is turned on, and ammonia gas is supplied to the excitation cell equipment via a pipe channel 6. Nitrogen radicals optically excited from the ammonia gas are generated. By selectively opening and closing a shutter 7, nitrogen can be introduced as dopant into growing epitaxial crystal of zinc selenide. Thereby material gas or dopant gas can be easily excited.

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